HAER No. MN-76

Cloverleaf Interchange
At the Junction of Trunk Highways
52, 3, and 55
Inver Grove Heights
Dakota County
Minnesota

HAER MINN 19-IVGRHE

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior Denver, Colorado 80225-0287

HISTORIC AMERICAN ENGINEERING RECORD

CLOVERLEAF INTERCHANGE

Location: At the junction of Trunk Highways 52, 3 and 55,

Inver Grove Heights, Dakota County, Minnesota.

UTMs: 15.492900.4964500

15.493500.4964500

15.492900.4964150

15.493500.4964150

USGS Inver Grove Heights, Minnesota Quadrangle,

1967

Date of Construction:

1940

Present Owner:

Minnesota Department of Transportation, 395 John

Ireland Boulevard - 612 E, St. Paul, Minnesota,

55155

Present Use:

Cloverleaf Interchange provides a grade-

separated means of conveying vehicular traffic

through this junction of east/west Trunk

Highway 55 and north/south Trunk Highways 3 and

52.

Significance:

Cloverleaf Interchange is an early example of the

use of this highway junction grade separation technique in a then-rural area of Minnesota.

Historians:

Frances P. Alexander, Holly K. Chamberlain, Travis

Dolence, and Olga Dunlap, The 106 Group Ltd.,

St. Paul, Minnesota, March 1994.

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LOCATION DESCRIPTION

Cloverleaf Interchange between Trunk Highways (TH) 52/TH 3 and TH 55 is located in Inver Grove Heights, Dakota County, Minnesota. Bordering the Mississippi River on the west, Inver Grove Heights is a suburb on the south side of St. Paul. The Interstate 494 beltway is located approximately three miles to the north.

PHYSICAL DESCRIPTION

The TH 52/TH 3 and TH 55 interchange controls vehicular access between two four lane, divided highways. The two highways connect the Twin Cities with minor urban centers in the well-populated southeastern region of the state. TH 52 and TH 3 follow the same route south from St. Paul to this junction, at which point the two highways diverge. TH 3 continues its southerly route to connect St. Paul to Faribault, Minnesota. TH 52 turns southeast at this junction to link St. Paul with Rochester. TH 55 runs southwest from Minneapolis to Hastings, which is located on the Mississippi River where the waterway separates Minnesota and Wisconsin.

The highway interchange is comprised of four, semi-circular access ramp roadways, each one lane wide, and one grade separation bridge, Bridge No. 5820 (see HAER No. MN-76-A). The ramps permit access to either highway, TH 52/3 or TH 55. In addition, the system of ramps allow directional change along the same route. The four ramps give the interchange its cloverleaf configuration. Sited at the center of this system of ramps, Bridge No. 5820, carrying TH 52/TH 3 over TH 55, allows uninterrupted traffic flow at the junction of these two routes. TH 52/TH 3 crosses TH 55 at a raised grade, and the ramps accommodate this change in grade between the two highways.

HISTORICAL INFORMATION

Designed in the late 1930s, Cloverleaf Interchange was built by the Minnesota Highway Department in 1940. It provided grade separation for the junction of Trunk Highways 55 and 218 (now Trunk Highway 3). It is among the earliest uses of this form of grade separation in Minnesota, and remains the only one in Dakota County. Highway safety considerations prompted the Minnesota Highway Department to place some importance on constructing grade-separation cloverleaves in the late 1930s. Because at-grade highway junctions were not considered as dangerous as at-grade railroad crossings, however, construction of highway grade separation mechanisms were not as high a priority, and therefore typically occurred later.

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Situated at the junction of roads leading to Minneapolis and St. Paul, this cloverleaf was built to facilitate travel from southeastern Minnesota into the Twin Cities, probably most particularly St. Paul. The junction which existed at this site prior to construction of the interchange, known as the Robert Street Cut-Off, was a source of concern in the mid-1920s to newspaper writers, who noted its unimproved state. South Robert Street, now also designated Trunk Highway 52 and Trunk Highway 3 at this location, led into St. Paul, while the more easily navigable Trunk Highway 55 led directly into Minneapolis. Concern was expressed over St. Paul potentially losing tourist dollars due to not being as accessible from this direction as was Minneapolis. This early and unusual use of a cloverleaf interchange in what was then a relatively isolated rural location indicates that tourist economics played a role in its construction. The location of the cloverleaf also reflects the priority of trunk highway planners of the time, who were largely concerned with moving traffic to urban centers, and not through them.

Cloverleaf Interchange was one of the first five structures of its type in the state, and was quite possibly the second. The Report of the Minnesota Commissioner of Highways for January 1939 - June 30, 1940 noted that there were five highway grade separations under construction during the reporting period of that document. One of those five, probably the grade separation at what was described as being at Robbinsdale separating TH 100 and Jefferson Highway, was completed by June 30, 1940. The other four were listed as being 75 percent completed by the same date. However, a photograph in the report highlights the cloverleaf under study in this documentation, showing it to be virtually complete, so it may have been the second to be finished in the state. 2

The construction of Cloverleaf Interchange, and its corresponding Bridge No. 5820, was achieved through a combination of state and federal funding but state highway commission reports do not specify which sources of federal financial assistance were utilized for any particular project. It is possible that more than one may have been used for the cloverleaf. Further complicating the funding picture is the fact that the cloverleaf and its bridge were considered separate structures in terms of federal funding purposes, the former bearing the designation of Federal Aid Project 538-A, while the latter was number 591-A. The federal government was probably following the lead of the state in this separation, as the trunk highway construction program had separate road construction and bridge construction divisions. In any event, the combined

¹Pat Nunnally, <u>Survey Report: History/Architecture, Minnesota Trunk</u> <u>Highway Archaeological Reconnaissance Survey, S.P. 1908-65</u>, 30 April 1993, pp. 4-5.

²Report of the Minnesota Commissioner of Highways, January 1939 - June 30, 1940, pp. 9, 11, and 14.

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structures very likely received supplementary federal funding through the Federal Aid Highway Act approved by Congress on July 11, 1916 and amended on June 16, 1936. The state received \$2, 616,850 in federal highway funds to be used in 1938 and 1939. In 1939, when the cloverleaf was being planned, \$1,588,404 was still available from the original allotment. These latter funds are likely the primary source of federal money for the interchange. Other federal programs of the day, such as the Works Progress Administration and National Industrial Recovery Act, may also have been involved in the construction.

Federal Aid Highway Act and the Minnesota Trunk Highway System

The Federal Aid Highway Act of 1916 was the major impetus for the creation of the Minnesota Trunk Highway System, of which Cloverleaf Interchange is a part. Congress passed the act, which allowed for annual appropriations to the states for road construction and improvements, in recognition of the increased need for highways stimulated by the rapidly growing usage of automobiles in all facets of life. In return for the funding, states were required to create a highway commission to coordinate matching funds, oversee federal disbursements, and plan a coherent network of roads and bridges. Minnesota's reaction to the act, a plan for the original 6,200-plus mile trunk highway system, was an ambitious one, resulting in reorganization of the state highway commission and creation in 1917 of the Minnesota Highway Department.⁴

These changes were codified in the Public Highways Act, passed by the Minnesota legislature in 1919. The trunk highways, which were actually created in 1921 out of existing roadways but were gradually increased over time, were one of four classes of public roads identified in the act. In addition to simply moving people, products, and vehicles from place to place, trunk highway planners placed a high priority on accomplishing those tasks safely. The state's concern for safety was mirrored by federal regulations emphasizing same: eliminating at-grade crossings became a federal priority in the mid-1930s. One means of achieving that goal included construction of highway grade separation mechanisms such as Cloverleaf Interchange.

³Ibid., p. 15.

⁴The 106 Group, Ltd., <u>Historical Context</u>, <u>Revised 1st Draft</u>, <u>Minnesota State-wide Survey of Selected Bridges</u>, September 1993, p. 5.

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Alterations

The roadways and ramps are maintained in good integrity. Bridge No. 5820 has experienced some deterioration, as noted in HAER No. MN-76-A.

PROJECT INFORMATION

This documentation was prepared in March, 1994 at the request of the Minnesota Department of Transportation in compliance with Section 106 of the National Historic Preservation Act of 1966. The Minnesota Department of Transportation has slated the Cloverleaf Interchange for replacement in 1994 with either an at-grade intersection or a diamond interchange. Project historians were Frances P. Alexander, Holly K. Chamberlain, Olga Dunlap, and Travis Dolence of The 106 Group, Ltd., 658 Grand Avenue, St. Paul, Minnesota, 55105. Project photographer was Mike Whye.

SOURCES

Minnesota Department of Transportation Records.

Nunnally, Pat. <u>Survey Report: History/Architecture, Minnesota Trunk</u>
<u>Highway Archaeological Reconnaissance Survey, S.P. 1908-65.</u> 30
April 1993.

The 106 Group, Ltd. <u>Historical Context, Revised 1st Draft, Minnesota Statewide Survey of Selected Bridges</u>. September 1993.

Report of the Minnesota Commissioner of Highways. July 1, 1939 - June 30, 1940 and July 1, 1940 - June 30, 1942.

LIKELY SOURCES NOT YET INVESTIGATED

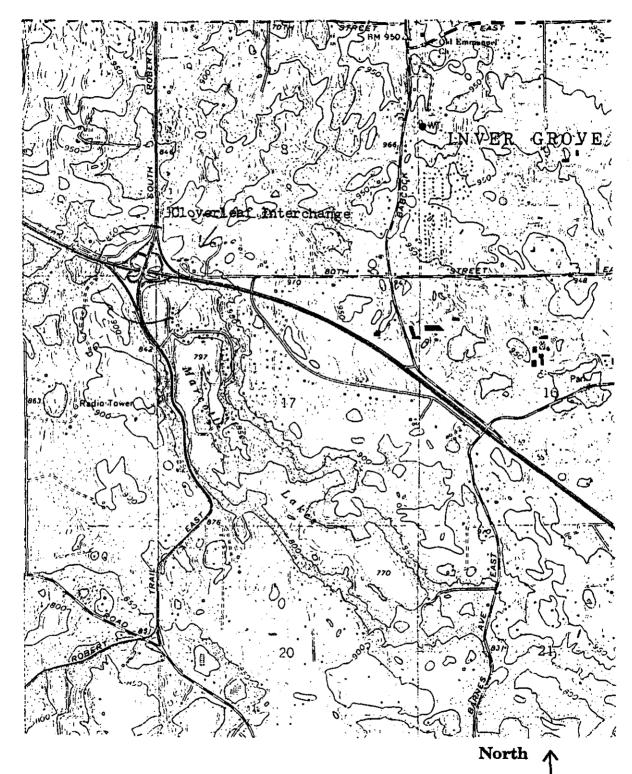
Future researchers seeking additional information on Cloverleaf Interchange may wish to consult federal records held by the National Archives and Records Administration. At the time this documentation was prepared, possibly relevant records were inaccessible due to being in transit between the National Archives facility at Suitland, Maryland and the new National Archives at College Park, Maryland. Additional data may exist in Record Group 30, Bureau of Public Roads, or other record groups containing documentation on federal

⁵Ibid., p. 9.

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highway funding in the 1930s and 1940s. Such record groups might include those on the Works Progress Administration and the National Industrial Recovery Administration. Cloverleaf Interchange is identified on the original plans as Federal Aid Project No. 538-A.

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Source:

USGS Inver Grove Heights Quadrangle, Minnesota, 1967